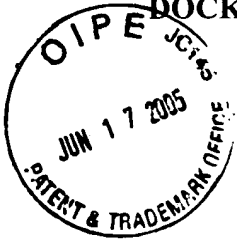


IFW

DOCKET NO.: MSFT-2732/305554.01

PATENT



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Kathuria, V. et al.

Confirmation No.: 7139

Application No.: 10/782,988

Group Art Unit: 2171

Filing Date: February 20, 2004

Examiner: Not Yet Assigned

For: **SYSTEMS AND METHODS FOR READING ONLY DURABLY
COMMITTED DATA IN A SYSTEM THAT OTHERWISE PERMITS LAZY
COMMIT OF TRANSACTIONS**

DATE OF DEPOSIT:

June 15, 2005

I HEREBY CERTIFY THAT THIS PAPER IS BEING
DEPOSITED WITH THE UNITED STATES POSTAL
SERVICE AS FIRST CLASS MAIL, POSTAGE PREPAID,
ON THE DATE INDICATED ABOVE AND IS
ADDRESSED TO THE UNITED STATES PATENT AND
TRADEMARK OFFICE, P.O. BOX 1450, ALEXANDRIA,
VA 22313-1450.

TYPED NAME: Steven B. Samuels
REGISTRATION NO.: 37,711

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 CFR § 1.56 and in accordance with 37 CFR §§ 1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 CFR § 1.56(b).

- ☒ In accordance with § 1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified

application, within three months of the date of entry into the national stage of the above identified application as set forth in § 1.491, before the mailing date of a first Office Action on the merits of the above-identified application, or before the mailing date of a first Office Action after the filing of request for continued examination under § 1.114, no additional fee is required.

- ☐ In accordance with § 1.97(c), this Information Disclosure Statement is being filed after the period set forth in § 1.97(b) above but before the mailing date of either a Final Action under § 1.116 or a Notice of Allowance under § 1.311, or before an action that otherwise closes prosecution in the application, therefore:

☐ Certification in Accordance with § 1.97(e) is attached; or

☐ The fee of \$180.00 as set forth in § 1.17(p) is attached.

- ☐ In accordance with § 1.97(d), this Information Disclosure Statement is being filed after the mailing date of either a Final Action under § 1.113 or a Notice of Allowance under § 1.311 but before, or simultaneously with, the payment of the Issue Fee, therefore included are: Certification in Accordance with § 1.97(e); and the submission fee of \$180.00 as set forth in § 1.17(p).

- ☒ Copies of reference numbers **1 thru 82** listed on the attached Form PTO-1449 are enclosed herewith.

- ☒ Copies of reference numbers **83 thru 103** on the attached Form PTO 1449 are not required to be submitted pursuant to the waiver of 37 CFR § 1.98(a)(2)(i).

☐ Copies of references - are not being submitted because they were previously cited by or submitted to the U.S. Patent and Trademark Office in patent application number , filed for

DOCKET NO.: MSFT-2732/305554.01 - 3 -

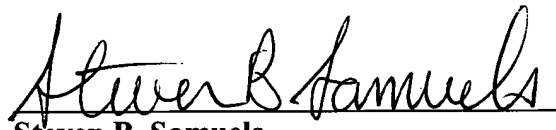
PATENT

which a claim for priority under 35 U.S.C. § 120 has been made in the
instant application.

There are no listed references which are not in the English language.

Please charge any deficiency or credit any overpayment to Deposit Account No. 23-
3050. This form is submitted in duplicate.

Date: *June 15, 2005*

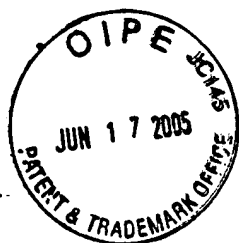

Steven B. Samuels
Registration No. 37,711

WOODCOCK WASHBURN LLP
One Liberty Place - 46th Floor
Philadelphia, PA 19103
Telephone: (215) 568-3100
Facsimile: (215) 568-3439

© 2005 WW



Form PTO-1449 Modified List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office		Docket No. MSFT-2732/305554.01	Application No. 10/782,988
		Applicant Kathuria, V. et al.	
		Filing Date February 20, 2004	Group 2171
		Confirmation No. 7139	
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	1	Andrews, T. et al., "Combining Language and Database Advances in an Object-Oriented Development Environment", <i>OOPSLA Proceedings</i> , October 4-8, 1987 , 430-440	
	2	Beard, et al., "Multilevel and Graphical Views of Metadata", <i>Research and Technology Advances in Digital Libraries</i> , 1998 , 256-265,	
	3	Beitner, N.D. et al., "Multimedia Support and Authoring in Microcosm: An Extended Model", <i>Department of Electronics and Computer Science</i> , University of Southampton, 12 pages	
	4	Berg, C., How Do I Create Persistent Java Objects? <i>Dr. Dobb's Journal</i> , 1997 , 22(4), 98-101	
	5	Bhattacharya, S. et al., "Coordinating Backup/Recovery and Data Consistency Between Database and File Systems", <i>International Conference on Management of Data and Symposium on Principles of Database Systems, Proceedings of the 2002 ACM SIGMOD International Conference on Management of Data</i> , 2002 , 500-511	
	6	Biliris, A., "The Performance of Three Database Storage Structures for Managing Large Objects", <i>ACM SIGMOD</i> , 1992 , 276-285	
	7	Booch, G. Benjamin/Cummings Publishing Co, "Object-Oriented Analysis and Design with Applications", 1994 , 155, 156, 179-183	
	8	Bracchi et al., "Binary Logical Associations in Data Modelling", <i>Modelling in Data Base Management Systems G.M. Nijssen, (ed); North Holland Publishing Company</i> : 1976 , 125-147	
	9	Buneman, P. et al., Inheritance and Persistence in Database Programming Languages, <i>ACM</i> , 1986 , 4-15	
	10	Chien, A.A., "Concurrent Aggregates (CA) – Design and Experience with a Concurrent Object – Oriented Language Based on Aggregates", <i>J. Parallel and Distributed Computing</i> , 1995 , 25(2), 174-196	
EXAMINER		DATE CONSIDERED	



Form PTO-1449 Modified List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office		Docket No. MSFT-2732/305554.01	Application No. 10/782,988
		Applicant Kathuria, V. et al.	
		Filing Date February 20, 2004	Group 2171
		Confirmation No. 7139	
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	11	Chrysostomidis, Chrysosimos, et al. "Geometric Modeling Issues in Computer Aided Design of Marine Structures", <i>MTS Journal</i> , 22(2) pp 15-33	
	12	"Computervision Launches Design Automation Development Platform for Windows", <i>PR Newswire</i> , Financial News, Jan. 10, 1995	
	13	D'Andrea, A. et al., "Unisql's Next Generation Object-Relational Database Management System", <i>ACM SIGMOD Record</i> , September 1996 , 25(2), 70-76	
	14	Darby, C., "Object Serialization in Java 1.1. Making Objects Persistent", <i>WEB Techniques</i> , 1997, 2(9), 55, 58-59	
	15	"Developer's Guide to Apple Data Detectors-For Version 1.0.2", ©Apple Computer, Inc., 1997, 1-34	
	16	Dietrich, Walter C., Jr., et al., "TGMS: An Object-Oriented System for Programming Geometry", <i>Software-Practice and Experience</i> , Oct 1989 , 19(10), 979-1013	
	17	Dobashi, Y. et al, "Skylight for Interior Lighting Design", <i>Computer Graphics Forum</i> , 1994, 13(3), C85-C96	
	18	Dorsch, Jeff, "Accel Signs with IBM to Buy Altium PCB Unit-Accel Technologies Acquires the Assets to Altium's P-CAD Business Unit", <i>EDA Licensing, Electronic New</i> , Jan.16, 1995 , 4 pages	
	19	Fegaras, Leonidas, "Optimizing Object Queries Using an Effective Calculus", <i>ACM Transactions on Database Systems</i> , Dec 2000 , 25(4), 457-516	
	20	Findler, R.B. et al., Contract Soundness for Object-Oriented Languages ACM Conference on Object-Oriented Programming Systems, Languages, and Applications, <i>OOPSLA</i> , 2001, 15 pages	
	21	Foley et al., Computer Graphics: Principles and Practices, Second Edition, Addison-Wesley Publishing Company, 1990, Ch. 5 and 9, pp. 201-283	
EXAMINER		DATE CONSIDERED	

BEST AVAILABLE COPY

Form PTO-1449 Modified		Docket No. MSFT-2732/305554.01	Application No. 10/782,988
List of Patent and Publications Cited by Applicant (Use several sheets if necessary)		Applicant Kathuria, V. et al.	
U.S. Department of Commerce Patent and Trademark Office		Filing Date February 20, 2004	Group 2171
		Confirmation No. 7139	
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	22	Friis, A.-Christensen, et al. "Geographic Data Modeling: Requirements and Research Issues in Geographic Data Modeling," November 2001 , <i>Proceedings of the 9th ACM International Symposium on Advances in Geographic Information Systems</i> , 2-8	
	23	Fuh, Y-C. et al, "Implementation of SQL3 Structured Types with Inheritance and Value Substitutability", <i>Digital Symposium Collection</i> , 2000 . Abstract only, 2 pages, www.acm.org/sigmod/disc/p_implementationoyostw.htm	
	24	Garret, J.H., Jr. et al, "An Object Oriented Environment for Representing Building Design and Construction Data", <i>Advanced Construction Technology Center</i> , June 1989 , Document No. 89-37-04. 1-34	
	25	Godoy Simões, M. et al, "A RISC-Microcontroller Based Photovoltaic System for Illumination Applications", <i>APEC 2000. Fifteenth Annual IEEE Applied Power Electronics Conference and Exposition</i> , February 6-10, 2000 , 2, 1151-1156	
	26	Goscinski, A. "Distributed Operating Systems The Logical Design", <i>Addison-Wesley</i> , 1991 , 306-313	
	27	Harrison, C.J. et al., "Structure Editors: User-Defined Type Values and Type Inference", <i>IEEE</i> , 2000 , 241-247	
	28	Haverlock, K., "Object Serialization, Java, and C++", <i>Dr. Dobb's Journal</i> , 1998 , 23(8), 32, 34, 36-37	
	29	Hay, David C, "Data Model Patterns: Convention of Thought", (Dorset House Publishing, New York, NY 1996 , 47-67, 235-259	
	30	Hernandez, M.A. et al, "The Merge/Purge Problem for Large Databases, International Conference on Management of Data and Symposium on Principles of Database Systems", <i>Proceedings of the 1995 ACM SIGMOD International Conference on Management of Data</i> , 1995 , 127-138	
	31	Hsiao, H.I. et al., "DLFM: A Transactional Resource Manager", <i>SIGMOD, Proceedings of the 2000 ACM SIGMOD International Conference on Management of Data</i> , 2000 , 518-528	
EXAMINER		DATE CONSIDERED	

BEST AVAILABLE COPY

Form PTO-1449 Modified		Docket No. MSFT-2732/305554.01	Application No. 10/782,988
List of Patent and Publications Cited by Applicant (Use several sheets if necessary)		Applicant Kathuria, V. et al.	
U.S. Department of Commerce Patent and Trademark Office		Filing Date February 20, 2004	Group 2171
		Confirmation No. 7139	
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	32	Kaneko, K, et al, "Design of 3D CG Data Model of Move Animation Database System", <i>Advanced Database Research and Development Series, vol. 3, Proceedings of the Second Far-East Workshop On Future Database Systems</i> , 1992 , 364-372	
	33	Kaneko, K. et al., Towards Dynamics Animation on Object-Oriented Animation Database System Move", <i>Advanced Database Research and Development Series, vol. 4, Database Systems for Advanced Applications</i> 1993 , 3-10	
	34	Katz, R.H., "Toward a Unified Framework for Version Modeling in Engineering Databases", <i>ACM Computing Surveys</i> , 1990 , 22(4), 375-408	
	35	Kawabe, S. et al, "A Framework for 3D Modeling Constraint-Based Description and Non-Manifold Geometric Modeling", <i>A Collection of Contributions based on Lectures Presented at the 2d Toyota Conference, Organization of Engineering Knowledge for Product Modelling in Computer Integrated Manufacturing</i> , Japan, Oct. 2-5, 1988 , 325-357	
	36	Kempfer, L., "CAD Jumps on Windows 3.1 Bandwagon", <i>Computer Aided Engineering</i> , 1993 , 24-25	
	37	Khan, L. et al, "A Performance Evaluation of Storing XML Data in Relational Database Management Systems. <i>WIDM</i> , 2001 , 31-38	
	38	Khoshafian, S. et al, "Object Identify". <i>OOPSLA'86</i> , 1986 , 21, 406-416	
	39	Kiesling, R., "ODBC in UNIX Environments", <i>Dr. Dobb's Journal</i> , December 2002 , 27(12), 16-22	
	40	King et al, "TriStarp- An investigation into the Implementation and Exploitation of Binary Relational Storage Structures". <i>Proc. 8.sup.th BNCOD(British National Conference On Data Bases)</i> , pp. 64-84 (York 1990).	
	41	Krouse, J.K., "Geometric Models for CAD/CAM", <i>Machine Design</i> , July 24, 1990 , 99-105	
	42	LeBlanc, Andrew R., et al. "Design Data Storage and Extraction Using Objects", <i>Concurrent Engineering: Research and Applications</i> , 1993 , 1, 31-38	
EXAMINER		DATE CONSIDERED	

BEST AVAILABLE COPY

Form PTO-1449 Modified		Docket No. MSFT-2732/305554.01	Application No. 10/782,988
List of Patent and Publications Cited by Applicant (Use several sheets if necessary)		Applicant Kathuria, V. et al.	
U.S. Department of Commerce Patent and Trademark Office		Filing Date February 20, 2004	Group 2171
		Confirmation No. 7139	
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	43	Leontiev, Y. et al, "On Type Systems for Object-Oriented Database Programming Languages", <i>ACM Computing Surveys</i> , December 2002 , 34(4), 409-449	
	44	Lim, J.B. et al, "Transaction Processing in Mobile, Heterogeneous Database Systems", <i>IEEE Trans. on Knowledge and Data Engineering</i> , 2002 ,14(6), 1330-1346	
	45	Mallet, S. et al., "Myrtle: A Set-Oriented Meta-Interpreter Driven by a Relational Trace for Deductive Databases Debugging", <i>Lecture Notes in Computer Science</i> , 1999 , 1559, 328-330	
	46	Mariani, J. A., Oggetto: "An Object Oriented Database Layered on a Triple Store", <i>The Computer Journal</i> , 1992 , 35(2),108-118	
	47	McMahon, L.E, "SED-A Non-Interactive Text Editor", Bell Laboratories, August 15, 1978 , 10 pages	
	48	"Mechanical Design Software (Buyers Guide)", <i>Computer-Aided Engineering</i> , Dec 1993 , 12(12), 32-36	
	49	Melton, J. et al, "SQL and Management of External Data", <i>SIGMOD Record</i> , March 2001 , 30(1), 70-77	
	50	Mitchell, W.J., "The Logic of Architecture", <i>Massachusetts Institute of Technology</i> , 1990 , 139-143	
	51	Navathe, S.B., "Evolution of Data Modeling for Databases," <i>Communications of the ACM</i> , September 1992 , 35(9), 112-123	
	52	Nelson, M. et al, "Generic Support for Caching and Disconnected Operation", <i>4th Workshop on Workstation Operating Systems</i> , Oct 1993 , 61-65	
EXAMINER		DATE CONSIDERED	

BEST AVAILABLE COPY

Form PTO-1449 Modified		Docket No. MSFT-2732/305554.01	Application No. 10/782,988
List of Patent and Publications Cited by Applicant (Use several sheets if necessary)		Applicant Kathuria, V. et al.	
U.S. Department of Commerce Patent and Trademark Office		Filing Date February 20, 2004	Group 2171
		Confirmation No. 7139	
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	53	Nijssen, G.M. et al., "Conceptual Schema and Relational Database Design, A Fact Oriented Approach", <i>Department of Computer Science, University of Queensland, Prentice Hall</i> , 10-33, 42-43, 48-51, 156-170	
	54	Oracle 9i SQL Reference, Release 2 (9.2). March 2002 , 13-89 to 13-90	
	55	Orenstein, J. et al, "Query Processing in the Object Store Database System", <i>ACM SIGMOD International Conference on Management of Data</i> , June 1992 , 21(2),403-412	
	56	Ottogalli, F.G. et al., "Visualisation of Distributed Applications for Performance Debugging", <i>Lecture Notes in Computer Science</i> , January 2001 , 2074, 831-840	
	57	Pachet, et al, "A Combinatorial Approach to Content-Based Music Selection", <i>Multimedia Computing and Systems</i> , Jun 7, 1999 , 457-462	
	58	Papiani, M. et al, "A Distributed Scientific Data Archive Using the Web, XML and SQL/MED", <i>SIGMOD Record</i> , September 1999 , 28(3), 56-62	
	59	Powell, M., "Object, References, Identifiers, and Equality White Paper", (Jul. 2, 1993), <i>OMG TC Document 93.7.5</i> , 1-24	
	60	Prosise, J., "2-D Drafting: Why Pay More?", <i>PC Magazine: The Independent Guide to IBM-Standard Personal Computing</i> , 1993 , 12(4), 255-289	
	61	Reiner, A. et al., "Benefits of X-based Three-Tier Client/Server Model with ESRI Applications", <i>Virtual Solutions</i> , 1995 , 9 pages	
	62	Read, III, B.C., "Developing the Next Generation Cockpit Display System", <i>IEEE Aerospace and Electronics Systems Magazine</i> , 1996 , 11(10), 25-28	
EXAMINER		DATE CONSIDERED	

BEST AVAILABLE COPY

Form PTO-1449 Modified		Docket No. MSFT-2732/305554.01	Application No. 10/782,988
List of Patent and Publications Cited by Applicant (Use several sheets if necessary)		Applicant Kathuria, V. et al.	
U.S. Department of Commerce Patent and Trademark Office		Filing Date February 20, 2004	Group 2171
		Confirmation No. 7139	
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	63	Rouse, N.E., "CAD Pioneers are Still Trailblazing", <i>Machine Design</i> , Oct. 22, 1987 , 59(25), 117-122	
	64	Roussopoulos, N. et al., "Using Semantic Networks for Data Base Management", <i>Proceedings of the 1st Supplemental VLDB Conference</i> , 1975 , 144-172	
	65	Santos, J.L.T. et al., "Computer Aided Mechanical Engineering Design Environment for Concurrent Design Process", <i>Proceedings of the 1993 ITEC Workshop on Concurrent Engineering</i> , May 4-6, 1993 , Simulation in Concurrent Engineering, 71-83	
	66	Seshadri, P., "Enhanced Abstract Data Types in Object-Relational Databases", <i>The VLDB Journal, The International Journal on Very Large Databases</i> , 1998 , 7, 130-140	
	67	Simon, A.R., <i>Strategic Database Technology: Management for the Year 2000</i> , 1995 , pp 6-9, 14-17, 55-57, Morgan Kaufmann Publishers	
	68	Sreenath, N., "A Hybrid Computation Environment for Multibody Simulation", <i>Mathematics and Computers in Simulation</i> , 1992 , 121-140	
	69	Singhal, A. et al., "DDB: An Object Design Data Manager for VLSI CAD", <i>Association for Computer Machinery</i> , 1993 , 467-470	
	70	Stevens, T., "Value in 3-D" <i>Industry Week</i> , January 8, 1995 , 45-46	
	71	Stonebraker, M., "The Case for Partial Indexes", <i>SIGMOD Record</i> , 1989 , 18(4), 4-9	
	72	Strickland, T.M., "Intersection of Relational and Object", <i>Proceedings of the AM/FM International Conference XVII</i> , March 14-17, 1994 , 69-75	
EXAMINER		DATE CONSIDERED	

BEST AVAILABLE COPY

Form PTO-1449 Modified	Docket No. MSFT-2732/305554.01	Application No. 10/782,988
List of Patent and Publications Cited by Applicant (Use several sheets if necessary)	Applicant Kathuria, V. et al.	
U.S. Department of Commerce Patent and Trademark Office	Filing Date February 20, 2004	Group 2171
	Confirmation No. 7139	
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
73	Sutherland, J. et al., "The Hybrid Object-Relational Architecture (HORA), An Integration of Object-Oriented and Relational Technology", <i>Applied Computing: States of the Art and Practice</i> , 1993 , 326-333	
74	Suzuki, H. et al., "Geometric Modeling for Modeling Products", <i>Proceedings of the Third international Conference on Engineering Graphics and Descriptive Geometry</i> , July 11-16, 1988 , Vienna Austria, 2, 237-243	
75	Sreekanth, U. et al., "A Specification Environment for Configuring a Discrete-Part Manufacturing System Simulation Infrastructure", <i>International Conference on Systems, Man and Cybernetics</i> , October 17-20, 1993 , 1, 349-354	
76	Taylor, R.H. et al., "An Integrated Robot System Architecture", <i>Proceedings of the IEEE</i> , July 1983 , 71(7), 842-856	
77	Varlamis I. et al., "Bridging XML-Schema and Relational Databases. A System for generating and Manipulating Relational Databases using Valid XML Documents", <i>DocEng' 01</i> , November 9-10, 2001	
78	Wilcox, J., "Object Databases-Object Methods in Distributed Computing", <i>Dr. Dobbs Journal</i> , November 1994 , 19(13), 26-34	
79	Watanabe, S., "Knowledge Integration for Architectural Design", <i>Knowledge-Based Computer-Aided Architectural Design</i> , 1994 , 123-146	
80	Waugh, A., "Specifying Metadata Standards for Metadata Tool Configuration", <i>Computer Networks and ISDN Systems</i> , 1998 , 30, 23-32	
81	Wold, E. et al., "Content-Based Classification, Search, and Retrieval of Audio", <i>IEEE Multimedia</i> , <i>IEEE Computer Society</i> , 1996 , 3, 27-36	
82	Yoshikawa, M. et al., "XRel: A Path-Based Approach to Storage and Retrieval of XML Documents Using Relational Databases", <i>ACM Transaction on Internet technology</i> , August 2001 , 1(1), 110-141	
EXAMINER		DATE CONSIDERED

BEST AVAILABLE COPY

Form PTO-1449 Modified

List of Patent and Publications
Cited by Applicant
(Use several sheets if necessary)

U.S. Department of Commerce
Patent and Trademark Office

Docket No.
MSFT-2732/305554.01

Application No.
10/782,988

Applicant
Kathuria, V. et al.

Filing Date
February 20, 2004

Group
2171

Confirmation No.
7139

U. S. PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Name	Class	Subclass
	83	2002/0091702 A1	07/11/02	Mullins	707	100
	84	2002/0198891 A1	12/26/02	Li, et al.	707	102
	85	5,900,870	05/04/99	Malone, et al.	345	333
	86	6,047,291	04/04/00	Anderson, et al.	707	103
	87	6,108,004	08/22/00	Medl	345	346
	88	6,112,024	08/29/00	Almond, et al.	395	703
	89	6,199,195 B1	03/06/01	Goodwin, et al.	717	1
	90	6,338,056 B1	01/08/02	Dessloch, et al.	707	2
	91	6,370,541 B1	04/09/02	Chou, et al.	707	103
	92	6,519,597 B1	02/11/03	Cheng, et al.	707	10
	93	6,556,983 B1	04/29/03	Alschuler, et al.	706	55
	94	6,578,046 B2	06/10/03	Chang, et al.	707	103
	95	6,772,178 B2	08/03/04	Mandal, et al.	707	204
	96	2002/0152422 A1	10/17/02	Sharma, et al.	714	13

FOREIGN PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Country	Translation	
					YES	NO

EXAMINER**DATE CONSIDERED**

BEST AVAILABLE COPY